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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/923,137	08/06/2001	Andreas Bogel	102147-200	8956

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WIGGIN & DANA LLP -
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EXAMINER

IP, SIKYIN

ART UNIT PAPER NUMBER

1742

DATE MAILED: 05/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/923,137

Applicant(s)

BOGEL ET AL.

Examiner

Sikyin Ip

Art Unit

1742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 10-68 is/are pending in the application.
- 4a) Of the above claim(s) 17-54 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-16 and 55-68 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 9.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Election/Restriction

1. Applicant's election with traverse of Group I, claims 1-16, in Paper No. 8, filed on February 20, 2003 is acknowledged. The traversal is on the ground(s) that as set forth in Paper No. 8, page 7 of the instant remarks. This is not found persuasive because page 16 of the instant specification fails to disclose the structure of the grain and furthermore, the combination of cold work and solution heat treatment are for the copper alloys of cited references of record (JP 59-193233, page 9, lines 4-12, for example).

The requirement is still deemed proper and is therefore made FINAL.

2. This application contains claims 17-54 are drawn to an invention nonelected with traverse in Paper No. 8, filed February 20, 2003. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 62 and 65 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject

matter which applicant regards as the invention.

5. Claim 62 is indefinite because the transitional expression “consisting of” in instant claims 55 and 60 is found inconsistent with the addition of Co as set forth in claim 62. Thus, the meaning of instant transitional expression “consisting of” is unclear.

6. Claim 65 is indefinite because the wording “type” is indefinite. When the expression “type” appended to an otherwise definite term, may render said term indefinite. Ex parte Copenhaver, 109 USPQ 118.

Claim Rejections - 35 USC § 103

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 1-8, 11-16, and 55-68 are rejected under 35 U.S.C. § 103 as being unpatentable over JP 59-193233 (PTO-1449, page 4, second full paragraph, pages 13-16, and page 19, second full paragraph).

10. Claims 1-8, 11-16 are rejected under 35 U.S.C. § 103 as being unpatentable over JP 2000063968 (abstract).

11. The cited reference(s) disclose(s) the features including the claimed Cu based alloy composition. The difference between the reference(s) and the claims are as follows: Cited references do not recite Fe/Ti ratio as in instant claims 6-7 and 60-61 and QFD. But, it is well settled that there is no invention in the discovery of a general formula if it covers a composition described in the prior art, *In re Cooper and Foley* 1943 C.D. 357, 553 O.G. 177; 57 USPQ 117, *Taklatwalla v. Marburg*, 620 O.G. 685, 1949 C.D. 77, and *In re Pilling*, 403 O.G. 513, 44 F(2) 878, 1931 C.D. 75. In the absence of evidence to the contrary, the selection of the proportions of elements would appear to require no more than routine investigation by those ordinary skilled in the art. *In re Austin, et al.*, 149 USPQ 685, 688. Therefore, the subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have selected the overlapping portion of the subject matter disclosed by the reference. An obviousness rejection based on similarity in chemical structure and function entails the motivation of one skilled in

the art to make a claimed compound, in the expectation that compounds similar in structure will have similar properties. *In re Gyurik*, 596 F.2d 1012, 1018, 201 USPQ 552, 557 (CCPA 1979); See *In re May*, 574 F.2d 1082, 1094, 197 USPQ 601, 611 (CCPA 1978) and *In re Hoch*, 57 CCPA 1292, 1296, 428 F.2d 1341, 1344, 166 USPQ 406, 409 (1970). Furthermore, overlapping ranges have been held to be a prima facie case of obviousness. As stated in *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976), “the disclosure in the prior art of any value within a claimed range is an anticipation of that range.” See also, *Titanium Metals Corporation of America*, 227 USPQ 773 (Fed. Cir. 1985), *In re Petering*, 301 F.2d 676, 133 USPQ 275 (CCPA 1962).

12. Cited references do not disclose the QFD value. But, said references electrical conductivity overlap those values in the instant Tables 1 and 2. Therefore, ordinary skill artisan would recognize the alloys of cited references would have the same QFD value because of the overlapped properties.

13. Moreover as is evinced by JP 59-193233, page 10, second full paragraph and page 19 that alloys of cited references are also known for products such as lead frames, lead pins, electrical wires, molds for casting, and etc that require same properties.

14. Cited grain and microstructure would have been inherently possessed by the

alloys of cited references because the composition and method steps are overlapped. In re Spade, 911 F.2d 705, 708, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990); In re Best, 195 USPQ, 430, and MPEP § 2112.01.

Response to Arguments

15. Applicant's arguments filed February 20, 2003 have been fully considered but they are not persuasive.

16. Applicants' argument with respect to JP2000-063968 is noted. But, instant claim 1 has open transitional expression which does not exclude the additional elements from cited reference. Furthermore, the total amount of optional elements such as Cr and others could be up to 1 wt.% which is overlapped the claimed 0.15 to 0.7 wt.% Cr (see abstract [57]).

17. Applicants argue that the alloys of JP 59-193233 requires Zr. But, applicants' attention is directed to page 2 (2. Scope of Patent Claim - claims 1 and 2) of the translation which discloses copper alloy containing either one of both Cr and Zr in claims 1 and 2. Zr is not required in one of the copper alloys.

18. Applicants argue that cited references disclose many optional elements. But, the listing of numerous solutions (here alloying elements) to a problem does not make any one solution less obvious. Ex parte Raychem Corp. 17 USPQ 2d 1417, 1424 (BPAI 1990) and Merck & Co. v. Biocraft Lab. Inc. 10 USPQ 2d 1843 (CAFC

1983). Moreover, one of ordinary skill artisan would have been led to select the claimed elements, motivated by a reasonable expectation of successfully achieving cited references' objectives. The disclosed genus would have rendered the species prima facie obvious. In re Woodruff, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990); Merck & Co., Inc. v. Biocraft Laboratories, Inc., 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir 1989); and In re Susi, 440 F.2d 442, 169 USPQ 423 (CCPA 1971).

Conclusion

19. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

The above rejection relies on the reference(s) for all the teachings expressed in the text(s) of the references and/or one of ordinary skill in the metallurgical art would have reasonably understood or implied from the text(s) of the reference(s). To emphasize certain aspect(s) of the prior art, only specific portion(s) of the text(s) have been pointed out. Each reference as a whole should be reviewed in responding to the rejection, since other sections of the same reference and/or various combination of the cited references may be relied on in future rejection(s) in view of amendment(s).

All recited limitations in the instant claims have been meet by the rejections as set forth above.

Applicant is reminded that when amendment and/or revision is required,

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applicant should therefore specifically point out the support for any amendments made to the disclosure. See MPEP § 2163.06 (a) and 37 C.F.R. § 1.119.


Examiner Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to S. Ip whose telephone number is (703) 308-2542. The examiner can normally be reached on Monday to Friday from 5:30 A.M. to 2:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Roy V. King, can be reached on (703)-308-1146.

The facsimile phone number for this Art Unit 1742 are (703) 305-3601 (Official Paper only) and (703) 305-7719 (Unofficial Paper only). When filing a FAX in Technology Center 1700, please indicate in the Header (upper right) "Official" for papers that are to be entered into the file, and "Unofficial" for draft documents and other communication with the PTO that are not for entry into the file of the application. This will expedite processing of your papers.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0651.



SIKYIN IP
PRIMARY EXAMINER
ART UNIT 1742

S. Ip
May 5, 2003